

Appendix H

Proposed New Amendments to the Land and Resource Management Plan for the Coronado National Forest (1986, as amended)

H.1 INTRODUCTION

Each administrative component of the National Forest System (national forests and grasslands) is managed under the governance of a Land and Resource Management Plan (commonly referred to as a “Forest Plan”) established under direction specified in the National Forest Management Act (16 U.S.C. 1604). The National Forest Management Act at 16 U.S.C. 1604(f)(4), provides a process for updating forest plans to keep them current with changes in management direction and resource conditions, and to accommodate subsequently proposed projects. These updates, known as amendments, may be adopted at any time during the planning period covered by a Forest Plan and may address a wide range of issues or changes to management direction needed to keep the forest plan current. As noted in the National Forest Management Act regulations, “[forest plans may] be amended in any manner whatsoever after final adoption after public notice. (16 U.S.C. 1604(f)(4))

Concurrently with the National Environmental Policy Act (NEPA) review of a proposed action, the USFS conducts a separate review to determine whether or not a proposed action and its alternatives are consistent with the governing forest plan. (16 U.S.C. 1604(i) If the proposed action or any alternative is inconsistent, the Forest Supervisor may propose to amend the Forest Plan to accommodate implementation of the proposal. (16 U.S.C.(f)(4)) Additionally, the Forest Supervisor is the responsible official for rendering a final decision on whether or not a proposed amendment is acceptable. At his or her discretion, the potential environmental impacts of a proposed amendment must be evaluated, either as part of the NEPA review of the proposed project to which it is related, or separately, in a stand-alone NEPA review. (16 U.S.C. 1604(g))

H. 2 CONSISTENCY REVIEW AND DETERMINATION

This Final Environmental Impact Statement (EIS) for Tucson Electric Power Company’s Sahuarita-Nogales Transmission Line discloses the effects of constructing, operating, and maintaining a 345-kV electric transmission line across National Forest System lands administered by the Coronado National Forest, Nogales Ranger District. In addition to the Final EIS analysis of potential environmental impacts, the USFS examined the no-action alternative and implementation of each of the action alternatives (Western, Central Options 1 and 2, Crossover Options 1 and 2 transmission line corridors), for consistency with the Coronado National Forest Land and Resource Management Plan (Forest Plan;1986, as amended) (see Figure H.2-1). This consistency review was necessary for the USFS to comply with the requirements at 36 CFR 219.10(e), “. . . the Forest Supervisor shall ensure that, subject to valid existing rights, all outstanding and future permits, contracts, cooperative agreements, and other instruments for occupancy and use of affected lands are consistent with the plan.”

The consistency review resulted in a determination that certain aspects of implementing each of the action alternatives would result in conditions that are not consistent with direction in the Forest Plan. To make the alternatives consistent with the Forest Plan, the Forest Supervisor determined that the following amendments, in general, would be necessary:

1. Establish new utility corridor in the Tumacacori Ecosystem Management Area of the Nogales Ranger District, Coronado National Forest.
2. Establish utility corridor width for segments of existing utility corridor in the Tumacacori Ecosystem Management Area that currently have only route direction and length defined.
3. Establish utility corridor width for some newly-designated utility corridor routes within the Tumacacori Ecosystem Management Area, Nogales Ranger District, Coronado National Forest.
4. Revise the visual quality objectives in portions of Management Areas 1, 3, 4, and 7B in the Tumacacori Ecosystem Management Area, Nogales Ranger District, Coronado National Forest.

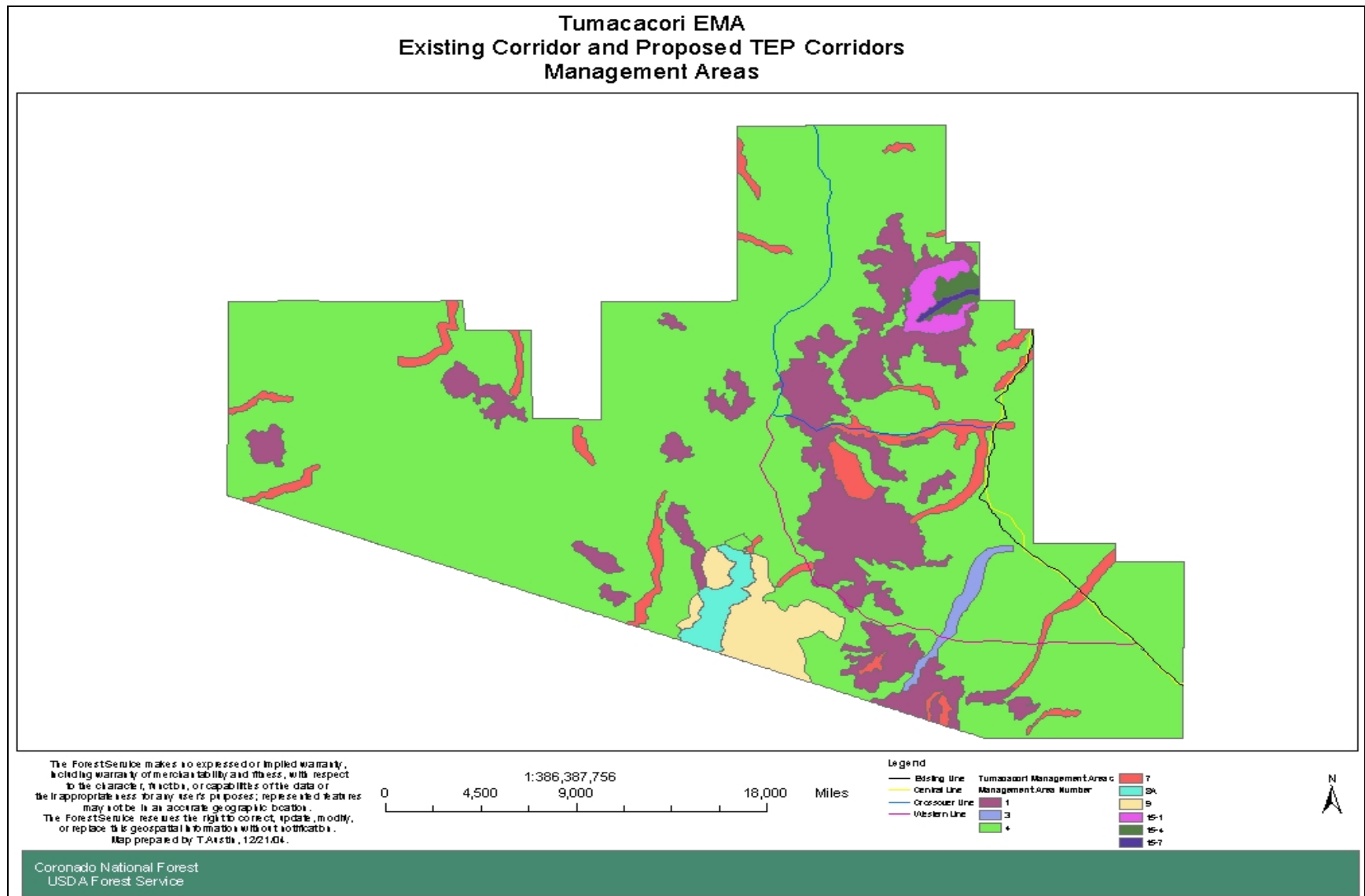


Figure H.2-1. Tumacacori EMA Existing Corridor and Proposed TEP Corridors Management Areas.

Before any of the action alternatives may be implemented, amendments to the Forest Plan shown in Table H-1 shall be necessary. Section H.3 provides a specific description of each amendment associated with the action alternatives.

Table H-1. Summary of Proposed New Forest Plan Amendments by Alternative

Type of Amendment	No Action	Western Corridor	Central Corridor (Option 1)	Central Corridor (Option 2)	Crossover Corridor (Option 1)	Crossover Corridor (Option 2)
Designate additional acreage as utility corridor	No change to the configuration of the existing utility corridor in the Tumacacori Ecosystem Management Area	Designate an additional 27 miles of ¼-mile (0.4 km)- wide utility corridor encompassing 4,320 acres (1,748 hectares)	Designate an additional 2 miles of ¼-mile (0.4 km)- wide utility corridor encompassing 320 acres (129 hectares)	No change to the configuration of the existing utility corridor in the Tumacacori Ecosystem Management Area	Designate an additional 19 miles of ¼-mile (0.4 km)- wide utility corridor encompassing 3,040 acres (1,230 hectares)	Designate an additional 17 miles of ¼-mile (0.4 km)- wide utility corridor encompassing 2,720 acres (1,101 hectares)
Change visual quality objectives	No change to the existing visual quality objective standards in the Tumacacori Ecosystem Management Area	Change visual quality objectives for 2,245 acres (909 hectares) of the Tumacacori Ecosystem Management Area	Change visual quality objectives for 1,121 acres (454 hectares) of the Tumacacori Ecosystem Management Area	Change visual quality objectives for 1,121 acres (454 hectares) of the Tumacacori Ecosystem Management Area	Change visual quality objectives for 1,506 acres (609 hectares) of the Tumacacori Ecosystem Management Area	Change visual quality objectives for 1,506 acres (609 hectares) of the Tumacacori Ecosystem Management Area

H.3 THE AMENDMENTS

H.3.1 Amendments Associated with Western Corridor Alternative

The proposed Western Corridor route passes through undeveloped National Forest System lands west of the Tumacacori and Atascosa Mountains in the Tumacacori EMA, then gradually turns east to its point of connection with an existing utility corridor where it would be co-located with the El Paso Natural Gas Company (EPNG) pipeline. The Western Corridor is approximately 29 miles (mi) (47 kilometers[km]) long and ¼-mi (0.4 km) wide [approximately 660 feet (ft) (201 meters[m])] on either side of a centerline. For evaluation of National Forest Management Act consistency, this proposed route was divided into two segments (Figure 1):

1. Segment A: Segment A is approximately 27 mi (43 km) in length. It would establish a new utility corridor where none now exists and establish a corridor width not previously specified in the Forest Plan.
2. Segment B: Segment B is approximately 2 mi (3 km) in length and is concurrent with the route of an existing utility corridor depicted in the Forest Plan. Segment B encompasses approximately 320 acres (129 hectares [ha]). For this segment, the Forest Plan would be amended to establish a corridor width not previously specified in the Forest Plan.

Amendment to Establish New Utility Transportation Corridor

Parts of the Western Corridor route would cross National Forest System lands that are not designated by the Forest Plan for use as a utility corridor. Building and operating an electrical transmission line in these areas would not be consistent with Forest Plan direction. Specifically, to bring the Western Corridor alternative into compliance with Forest Plan direction, the Forest Plan Transportation System and Utilities Corridor Map (Figure H.3.1-1) would be modified to depict the establishment of a new utility corridor of approximately 27 mi (43 km) having a width of ¼-mi (0.4-km) [approximately 660 ft (201 m) on either side of a centerline], which follows the route described as the Western Corridor alternative.

Amendment to Change Visual Quality Objectives in Management Areas 1, 3, 4, and 7B

Placement of fully aboveground structures, such as the proposed transmission line and associated facilities, in the Western Corridor route would not be consistent with Forest Plan direction for attainment of visual quality objectives. Specifically, the Forest Plan would require an amendment to change the visual quality objectives in Management Areas 1, 3, 4, and 7B on 2,245 acres (909 ha) of the Tumacacori EMA. Table H-2 details the changes to Forest Plan text required to bring the Western Corridor into compliance with Forest Plan direction. For each row in Table H-2, the existing text in the Forest Plan would be deleted and replaced by the specified amended text.

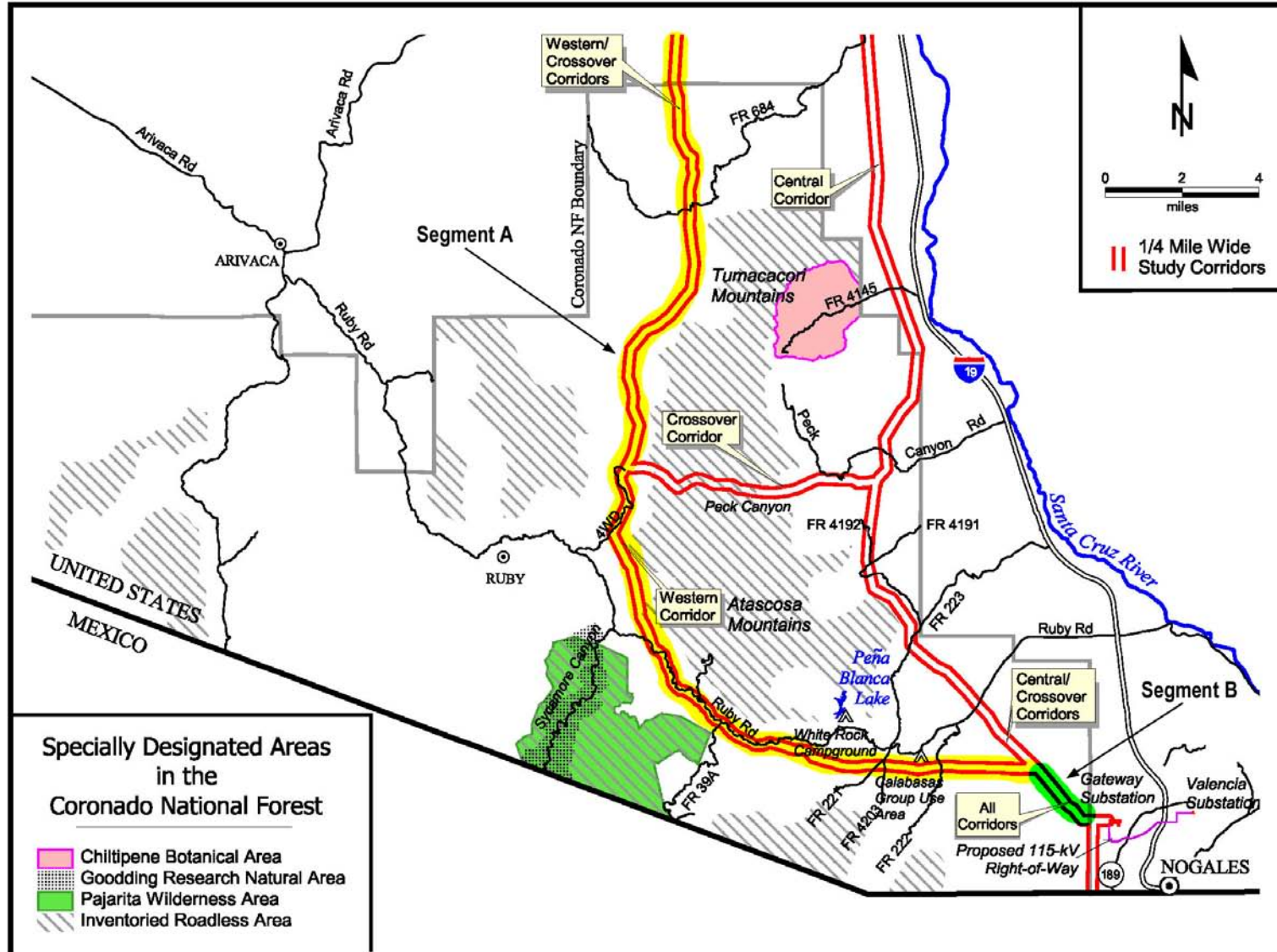


Figure H.3-1. Western Corridor on the Coronado National Forest.

Table H-2 Comparison of Current and Amended Forest Plan Text Proposed Western Corridor Alternative

Forest Plan Reference	Current Forest Plan Text	Amended Text
Management Area 1 Page 47 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 12,710 acres Retention 13% 51,819 acres Partial Retention 53% 33,265 acres Modification 33% 978 acres Maximum Modification 1%	Manage the following acres at the indicated visual quality objectives: 12,498 acres Retention 13% 51,819 acres Partial Retention 53% 33,265 acres Modification 33% 1,190 acres Maximum Modification 1%
Management Area 3 Page 55 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 8,125 acres Retention 55% 3,988 acres Partial Retention 27% 2,659 acres Modification 18%	Manage the following acres at the indicated visual quality objectives: 8,076 acres Retention 55% 3,988 acres Partial Retention 27% 2,659 acres Modification 18% 49 acres Maximum Modification <0.4%
Management Area 4 Page 62 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 135,201 acres Retention 12% 406,144 acres Partial Retention 36% 440,208 acres Modification 39% 146,736 acres Maximum Modification 13%	Manage the following acres at the indicated visual quality objectives: 133,892 acres Retention 12% 405,534 acres Partial Retention 36% 440,208 acres Modification 39% 148,655 acres Maximum Modification 13%
Management Area 7B Page 71 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 6,165 acres Retention 36% 5,651 acres Partial Retention 33% 4,281 acres Modification 25% 1,027 acres Maximum Modification 6%	Manage the following acres at the indicated visual quality objectives: 6,100 acres Retention 36% 5,651 acres Partial Retention 33% 4,281 acres Modification 25% 1,092 acres Maximum Modification 6%

H.3.2 Amendments Associated with Central Corridor Alternative (Option 1)

The transmission line route designated as the Central Corridor (Option 1) follows an existing utility corridor designated in the Forest Plan, except for a length of about 2 miles where it diverts from the utility corridor to avoid crossing the Tumacacori Inventoried Roadless Area (IRA). The existing utility corridor contains the El Paso Natural Gas Company's underground natural gas pipeline. This corridor route generally follows the route of the EPNG pipeline right-of-way (ROW), though the pipeline deviates from the corridor in some locations.

The gas pipeline meets the current visual quality objectives in the Forest Plan because its structures are primarily underground, with little surface disturbance and few visual intrusions on the landscape. Placement of fully aboveground structures, such as the proposed transmission line and associated facilities, would not be consistent with Forest Plan direction for visual quality objectives.

The Central Corridor (Option 1) route is approximately 15 mi (24 km) long and ¼-mi (0.4 km) wide [approximately 660 ft (201 m) on either side of a centerline]. For National Forest Management Act consistency purposes, this proposed route is divided into three segments (Figure 2):

1. Segment A: Segment A is approximately 6.7 mi (10.8 km) in length and encompasses approximately 1,072 acres (433.8 ha). This segment is concurrent with the route of an existing utility corridor in the Tumacacori EMA depicted on the Transportation System and Utilities

Corridor Map in the Forest Plan. For this segment, the Forest Plan would be amended to establish a corridor width of ¼-mi (0.40- km). Corridor width was not previously specified in the Forest Plan. Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.

2. Segment B: Segment B (Option 1) is approximately 1.9 mi (3.1 km) in length and encompasses approximately 304 acres (123.0 ha). This segment is concurrent with the route of an existing utility corridor in the Tumacacori EMA depicted on the Transportation System and Utilities Corridor Map in the Forest Plan. For this segment, the Forest Plan would be amended to establish a corridor width of ¼-mi (0.40 km). Corridor width was not previously specified in the Forest Plan. Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.
3. Segment C: Segment C as is approximately 6.5 mi (10.5 km) in length and encompasses approximately 1,072 acres (433.8 ha). This segment is concurrent with the route of an existing utility corridor in the Tumacacori EMA depicted on the Transportation System and Utilities Corridor Map in the Forest Plan. For this segment, the Forest Plan would be amended to establish a corridor width of ¼-mi (0.40 km). Corridor width was not previously specified in the Forest Plan. Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.
- 4.

Specifically, before the Central Corridor (Option 1) route could be implemented, the Forest Plan would require amendment to establish a new utility transportation corridor in the Tumacacori EMA and to change the visual quality objectives in Management Areas 4 and 7B on 1,121 acres (454 hectares) of the Tumacacori EMA.

Amendment to Establish New Utility Transportation Corridor

To bring the Central Corridor (Option 1) route into compliance with Forest Plan direction, the Forest Plan Transportation System and Utilities Corridor Map (Figure H.3.2-1) would be modified to depict the route for the Central Corridor (Option 1) and the ¼-mi (0.4 kilometer) width of the utility corridor.

Amendment to Change Visual Quality Objectives in Management Areas 4 and 7B

Installation of a fully aboveground facility, such as the proposed transmission line and associated facilities in the Central Corridor (Option 1) route would not be consistent with Forest Plan direction for attainment of visual quality objectives. Specifically, the Forest Plan would require an amendment to change the visual quality objectives in Management Areas 4 and 7B on 1,121 acres (454 ha) of the Tumacacori EMA. Table H-3 details the changes to Forest Plan text required to bring the Central Corridor (option 1) alternative into compliance with Forest Plan direction. For each row in Table H-3, the existing text in the Forest Plan would be deleted and replaced by the amended text.

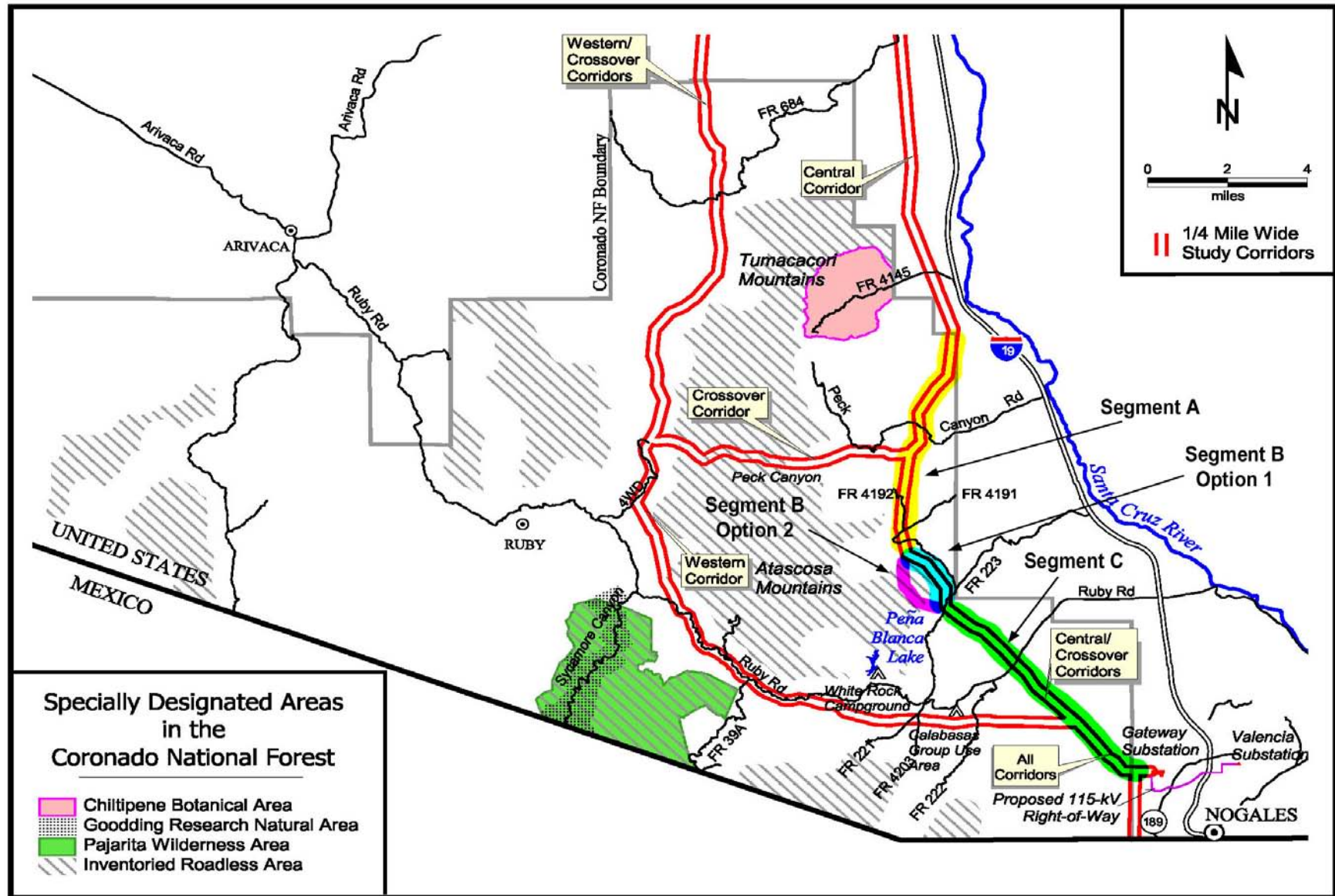


Figure H.3.2-1 Specially Designated Areas in the Coronado National Forest

Table H-3. Comparison of Current and Amended Forest Plan Text Central Corridor (Option 1) Alternative

Forest Plan Reference	Current Forest Plan Text	Amended Text
Management Area 4 Page 62 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 135,201 acres Retention 12% 406,144 acres Partial Retention 36% 440,208 acres Modification 39% 146,736 acres Maximum Modification 13%	Manage the following acres at the indicated visual quality objectives: 135,080 acres Retention 12% 406,114 acres Partial Retention 36% 439,346 acres Modification 39% 147,749 acres Maximum Modification 13%
Management Area 7B Page 71 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 6,165 acres Retention 36% 5,651 acres Partial Retention 33% 4,281 acres Modification 25% 1,027 acres Maximum Modification 6%	Manage the following acres at the indicated visual quality objectives: 6,111 acres Retention 36% 5,646 acres Partial Retention 33% 4,233 acres Modification 25% 1,134 acres Maximum Modification 6%

H.3.3 Amendments Associated with Central Corridor (Option 2)

The Central Corridor (Option 2) route follows an existing designated utility corridor that is presently occupied by an underground natural-gas pipeline. The general route of this corridor, which passes through the Tumacacori EMA, is depicted on the Forest Plan Transportation System and Utilities Corridor Map (see Figure H.3.3-1), however, the width of the corridor is not identified. As depicted, this utility corridor generally follows the route of the EPNG pipeline ROW with slight deviations at a few locations. The gas pipeline meets the current visual quality objectives in the Forest Plan because its structures are primarily underground, with little surface disturbance and few visual intrusions on the landscape. The Forest Plan would be amended to establish a corridor width of ¼-mi (0.40 km). Corridor width was not previously specified in the Forest Plan.

Placement of fully aboveground structures, such as the proposed transmission line and associated facilities, would not be consistent with Forest Plan direction for attainment of visual quality objectives. Specifically, before the Central Corridor (Option 2) alternative could be implemented, the Forest Plan would require an amendment to the Forest Plan to change the visual quality objectives in Management Areas 4 and 7B on 1,121 acres (454 ha) of the Tumacacori EMA.

Amendment to Change Visual Quality Objectives in Management Areas 4 and 7B

Table H-4 details the changes to Forest Plan text required to make implementation of the Central Corridor (Option 2) alternative consistent with Forest Plan direction. For each row in Table H-4, the existing text in the Forest Plan would be deleted and replaced by the amended text.

Table H-4. Comparison of Current and Amended Forest Plan Text Central Corridor (Option 2) Alternative

Forest Plan Reference	Current Forest Plan Text	Amended Text
Management Area 4 Page 62 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 135,201 acres Retention 12% 406,144 acres Partial Retention 36% 440,208 acres Modification 39% 146,736 acres Maximum Modification 13%	Manage the following acres at the indicated visual quality objectives: 135,080 acres Retention 12% 406,114 acres Partial Retention 36% 439,346 acres Modification 39% 147,749 acres Maximum Modification 13%
Management Area 7B Page 71 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 6,165 acres Retention 36% 5,651 acres Partial Retention 33% 4,281 acres Modification 25% 1,027 acres Maximum Modification 6%	Manage the following acres at the indicated visual quality objectives: 6,111 acres Retention 36% 5,646 acres Partial Retention 33% 4,233 acres Modification 25% 1,134 acres Maximum Modification 6%

H. 3.4 Amendments Associated with Crossover Corridor (Option 1) Alternative

The transmission line route designated as the Crossover Corridor (Option 1) traverses undeveloped National Forest System lands west of the Atascosa Mountains to a point where it turns east to cross through Peck Canyon to a connection point along the utility corridor designated in the Forest Plan and occupied by the underground EPNG pipeline. This route modifies the location of the existing Forest Plan corridor to avoid crossing the Tumacacori IRA.

The portion of the Crossover Corridor (Option 1) co-located with the existing utility corridor meets the visual quality objectives in the Forest Plan because its structures are primarily underground, with little surface disturbance and few visual intrusions on the landscape. Placement of fully aboveground structures, such as the proposed transmission line and associated facilities, would not be consistent with Forest Plan direction for visual quality objectives in the portions of the corridor coincident with the mapped corridor in the Forest Plan, or the portions of the corridor where establishment of new utility transportation corridor would be required.

Specifically, before the Crossover Corridor (Option 1) route could be implemented, the Forest Plan would require amendments to establish a new utility corridor in the Tumacacori EMA and to change the visual quality objectives in Management Areas 1, 3, 4 and 7B on 1,506 acres (609 ha) of the Tumacacori EMA.

The Crossover Corridor (Option 1) route is approximately 30 mi (48 km) in length and ¼-mi (0.4 km) in width [approximately 660 ft (201 m) on either side of a centerline]. For National Forest Management Act consistency review, this proposed route was divided into five segments (Figure H.3.4-1):

1. Segment A: Segment A is approximately 10.7 mi (17.2 km) in length and encompasses approximately 1,712 acres (692.8 ha). For this segment, the Forest Plan would be amended by modifying the Transportation System and Utilities Corridor Map to establish new utility corridor in the Tumacacori EMA where none existed before. The mapped location would be as depicted for Crossover Corridor, Segment A, in Figure 2.1-6 and the corridor width would be established as ¼-mile (0.40 km). Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.
2. Segment B: Segment B is approximately 7 mi (11.3 km) in length and encompasses approximately 1,120 acres (453.2 ha). For this segment, the Forest Plan would be amended by

modifying the Transportation System and Utilities Corridor Map to establish new utility corridor in the Tumacacori EMA where none existed before. The mapped location would be as depicted for Crossover Corridor Segment B, in Figure 2.1-6 and the corridor width would be established as ¼-mi (0.40 km). Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.

3. Segment C: Segment C is approximately 3.2 mil (5.2 km) in length and encompasses approximately 1,072 acres (433.8 ha). This segment is concurrent with the route of an existing utility corridor in the Tumacacori EMA depicted on the Transportation System and Utilities Corridor Map in the Forest Plan. For this segment, the Forest Plan would be amended to establish a corridor width of ¼-mi (0.40 km). Corridor width was not previously specified in the Forest Plan. Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.
4. Segment D: Segment D (Option 1) is approximately 1.9 mi (3.1 km) in length and encompasses approximately 304 acres (123.0 ha). For this segment, the Forest Plan would be amended by modifying the Transportation System and Utilities Corridor Map to establish new utility corridor in the Tumacacori EMA where none existed before. The mapped location would be as depicted for Segment D (Option 1), in Figure 2.1-6 and the corridor width would be established as ¼-mi (0.40 km). Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.
5. Segment E: Segment E is approximately 6.5 mi (10.5 km) in length and encompasses approximately 1,040 acres (420.8 ha). This segment is concurrent with the route of an existing utility corridor in the Tumacacori EMA depicted on the Transportation System and Utilities Corridor Map in the Forest Plan. For this segment, the Forest Plan would be amended to establish a corridor width of ¼-mile (0.40 km). Corridor width was not previously specified in the Forest Plan. Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.

Amendment to Establish New Utility Transportation Corridor

To bring the Crossover Corridor (Option 1) route into compliance with Forest Plan direction, the Forest Plan Transportation System and Utilities Corridor Map (Figure H.3.4-1) would be modified to depict the route for the Crossover Corridor (Option 1) and the ¼-mi (0.4 kilometer) width [approximately 660 ft (201 m) on either side of a centerline] of the corridor.

Amendment to Change Visual Quality Objectives in Management Areas 1, 4, and 7B

Placement of fully aboveground structures, such as the proposed transmission line and associated facilities, in the Crossover Corridor (Option 1) route would not be consistent with Forest Plan direction for attainment of visual quality objectives. Specifically, the Forest Plan would require an amendment to change the visual quality objectives in Management Areas 1, 4, and 7B on 1,506 acres (609 ha) of the Tumacacori EMA. Table H-5 details the changes to Forest Plan text required to bring the proposed action into compliance with Forest Plan direction. For each row in Table H-5, the existing text in the Forest Plan would be deleted and replaced by the amended text.

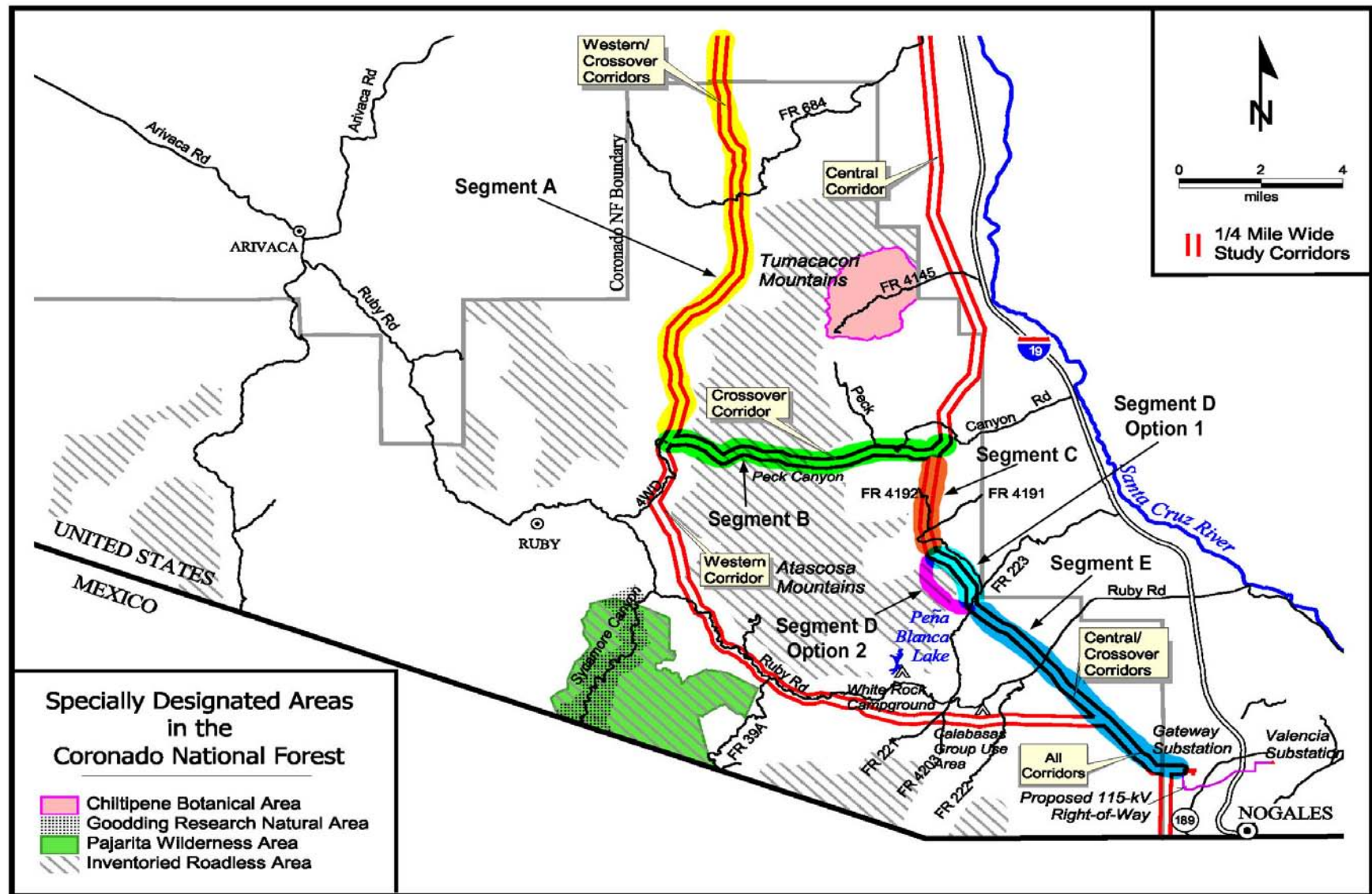


Figure H.3.4-1 Forest Plan Transportation System and Utilities Corridor Map

Table H-5. Comparison of Current and Amended Forest Plan Text Crossover Corridor (Option 1) Alternative

Forest Plan Reference	Current Forest Plan Text	Amended Text
Management Area 1 Page 47 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 12,710 acres Retention 13% 51,819 acres Partial Retention 53% 33,265 acres Modification 33% 978 acres Maximum Modification 1%	Manage the following acres at the indicated visual quality objectives: 12,710 acres Retention 13% 51,818 acres Partial Retention 53% 33,265 acres Modification 33% 979 acres Maximum Modification 1%
Management Area 4 Page 62 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 135,201 acres Retention 12% 406,144 acres Partial Retention 36% 440,208 acres Modification 39% 146,736 acres Maximum Modification 13%	Manage the following acres at the indicated visual quality objectives: 135,161 acres Retention 12% 405,840 acres Partial Retention 36% 439,372 acres Modification 39% 147,916 acres Maximum Modification 13%
Management Area 7B Page 71 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 6,165 acres Retention 36% 5,651 acres Partial Retention 33% 4,281 acres Modification 25% 1,027 acres Maximum Modification 6%	Manage the following acres at the indicated visual quality objectives: 6,165 acres Retention 36% 5,651 acres Partial Retention 33% 3,957 acres Modification 23% 1,351 acres Maximum Modification 8%

H. 3.4 Amendments Associated with Crossover Corridor (Option 2) Alternative

The transmission line route designated as the Crossover Corridor (Option 2) traverses undeveloped National Forest System lands west of the Atascosa Mountains to a point where it turns east to cross through Peck Canyon to a connection point along the utility corridor designated in the Forest Plan and occupied by the underground EPNG pipeline. This route follows the location of the existing Forest Plan corridor and crosses the Tumacacori IRA

The portion of the Crossover Corridor (Option 2) co-located with the existing utility corridor meets the visual quality objectives in the Forest Plan because its structures are primarily underground, with little surface disturbance and few visual intrusions on the landscape. Placement of fully aboveground structures, such as the proposed transmission line and associated facilities, would not be consistent with Forest Plan direction for visual quality objectives in the portions of the corridor coincident with the mapped corridor in the Forest Plan, or the portions of the corridor where establishment of new utility transportation corridor would be required.

Specifically, before the Crossover Corridor (Option 2) route could be implemented, the Forest Plan would require amendments to establish a new utility corridor in the Tumacacori Ecosystem Management Area and to change the visual quality objectives in Management Areas 1, 3, 4 and 7B on 1,506 acres (609 ha) of the Tumacacori EMA.

The Crossover Corridor (Option 2) route is approximately 30 mi (48 km) in length and ¼-mi (0.4 km) in width [approximately 660 ft (201 m) on either side of a centerline]. For National Forest Management Act consistency review, this proposed route was divided into five segments (see Figure 5):

1. Segment A: Segment A is approximately 10.7 mi (17.2 km) in length and encompasses approximately 1,712 acres (692.8 ha). For this segment, the Forest Plan would be amended by modifying the Transportation System and Utilities Corridor Map to establish new utility corridor

in the Tumacacori EMA where none existed before. The mapped location would be as depicted for Crossover Corridor, Segment A, in Figure 2.1-6 and the corridor width would be established as ¼-mi (0.40-km). Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.

2. Segment B: Segment B is approximately 7 mi (11.3 km) in length and encompasses approximately 1,120 acres (453.2 ha). For this segment, the Forest Plan would be amended by modifying the Transportation System and Utilities Corridor Map to establish new utility corridor in the Tumacacori EMA where none existed before. The mapped location would be as depicted for Crossover Corridor Segment B, in Figure 2.1-6 and the corridor width would be established as ¼-mile (0.40 km). Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.
3. Segment C: Segment C is approximately 3.2 mi (5.2 km) in length and encompasses approximately 1,072 acres (433.8 ha). This segment is concurrent with the route of an existing utility corridor in the Tumacacori EMA depicted on the Transportation System and Utilities Corridor Map in the Forest Plan. For this segment, the Forest Plan would be amended to establish a corridor width of ¼-mi (0.40-km). Corridor width was not previously specified in the Forest Plan. Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.
4. Segment D: Segment D (Option 2) is approximately 1.9 mi (3.1 km) in length and follows the existing corridor through a portion of the Tumacacori IRA.
5. Segment E: Segment E is approximately 6.5 mi (10.5 km) in length and encompasses approximately 1,040 acres (420.8 ha). This segment is concurrent with the route of an existing utility corridor in the Tumacacori EMA depicted on the Transportation System and Utilities Corridor Map in the Forest Plan. For this segment, the Forest Plan would be amended to establish a corridor width of ¼-mile (0.40 km). Corridor width was not previously specified in the Forest Plan. Additionally, management direction in the Forest Plan regarding visual quality objectives would be changed.

Amendment to Establish New Utility Transportation Corridor

To bring the Crossover Corridor (Option 2) route into compliance with Forest Plan direction, the Forest Plan Transportation System and Utilities Corridor Map (see Figure 4) would be modified to depict the route for the Crossover Corridor (Option 2) and the ¼-mi (0.4 km) width [approximately 660 ft (201 m) on either side of a centerline] of the corridor.

Amendment to Change Visual Quality Objectives in Management Areas 1, 4, and 7B

Placement of fully aboveground structures, such as the proposed transmission line and associated facilities, in the Crossover Corridor (Option 2) route would not be consistent with Forest Plan direction for attainment of visual quality objectives. Specifically, the Forest Plan would require an amendment to change the visual quality objectives in Management Areas 1, 4, and 7B on 1,506 acres (609 ha) of the Tumacacori EMA. Table H-6 details the changes to Forest Plan text required to bring the proposed action into compliance with Forest Plan direction. For each row in Table H-6, the existing text in the Forest Plan would be deleted and replaced by the amended text.

Table H-6. Comparison of Current and Amended Forest Plan Text Crossover Corridor (Option 2) Alternative

Forest Plan Reference	Current Forest Plan Text	Amended Text
Management Area 1 Page 47 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 12,710 acres Retention 13% 51,819 acres Partial Retention 53% 33,265 acres Modification 33% 978 acres Maximum Modification 1%	Manage the following acres at the indicated visual quality objectives: 12,710 acres Retention 13% 51, 818 acres Partial Retention 53% 33,265 acres Modification 33% 979 acres Maximum Modification 1%
Management Area 4 Page 62 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 135,201 acres Retention 12% 406,144 acres Partial Retention 36% 440,208 acres Modification 39% 146,736 acres Maximum Modification 13%	Manage the following acres at the indicated visual quality objectives: 135,161 acres Retention 12% 405,840 acres Partial Retention 36% 439,372 acres Modification 39% 147,916 acres Maximum Modification 13%
Management Area 7B Page 71 Visual Resource Management	Manage the following acres at the indicated visual quality objectives: 6,165 acres Retention 36% 5,651 acres Partial Retention 33% 4,281 acres Modification 25% 1,027 acres Maximum Modification 6%	Manage the following acres at the indicated visual quality objectives: 6,165 acres Retention 36% 5,651 acres Partial Retention 33% 3,957 acres Modification 23% 1,351 acres Maximum Modification 8%

**DETERMINATION OF
NATIONAL FOREST MANAGEMENT ACT
SIGNIFICANCE OF THE PROPOSED
AMENDMENTS**

H. 4 INTRODUCTION

National Forest Management Act regulations at 36 CFR 219.10(f) state: “Based on an analysis of the objectives, guidelines, and other contents of the forest plan, the Forest Supervisor shall determine whether a proposed amendment would result in a significant¹ change in the [forest] plan.” Forest Service Handbook 1909.12, Chapter 5.32 – The Forest Service Land and Resource Management Planning Handbook – provides the framework for proposing and analyzing changes to Forest Plans, including the process to be used when determining if a change is significant or not significant from the perspective of the National Forest Management Act. Four factors are evaluated to make the significance determination with respect to the National Forest Management Act:

1. Timing
2. Location and size
3. Goals, objectives, and outputs
4. Management prescriptions

Analysis of the Timing Factor

The timing factor examines when a Forest Plan should be amended. Both the age of the underlying documents and the duration of the amendment are relevant considerations. Forest Service Handbook 1909.12 indicates that, the later the change (in the period covered by the forest plan), the less significant the change is likely to be.

The Coronado National Forest is currently outside of the planning period expected in its 1986 Forest Plan². The Forest Plan was originally considered for revision in 2001. However, national direction published in the *Federal Register* in November 2001 delayed the scheduled revision until 2004, with an implementation date of 2009. The expected implementation period for Tucson Electric Power Company’s proposal is between 2005 and 2009, within the timeframe that the Coronado National Forest would continue to be governed by direction in the existing Forest Plan. Initiating an amendment process for this proposal would allow implementation to occur before the expected completion of a Forest Plan revision.

Designate Additional Acreage as a Utility Corridor

Because Forest Plan revision is scheduled to be completed sometime during or shortly before implementation of any of the action alternatives, it is determined that, with respect to the timing factor, the designation of additional acreage as a utility corridor in a Forest Plan amendment would not be significant.

Change Visual Quality Objectives

Because Forest Plan revision is scheduled to be completed sometime during or shortly before implementation of any of the action alternatives, it is determined that, with respect to the timing factor, an amendment to change visual quality objectives would not be significant.

¹ The concept of “significance” from the perspective of the National Forest Management Act differs from the definition and concept of this word as it is applied under the National Environmental Policy Act. The majority of this Final Environmental Impact Statement applies the concept used in the National Environmental Policy Act; however, this appendix is devoted to describing “significance” from the perspective of the National Forest Management Act and its implementing regulations and policy.

² USFS TBD

Analysis of the Location and Size Factors

The key to determining National Forest Management Act significance with respect to the location and size factors is context – “the relationship of the affected area to the overall planning area.” The smaller the area affected, the less likely the change is to be significant. With respect to a Forest Plan amendment, the appropriate planning area to consider when determining significance is the entire Coronado National Forest. The amendments proposed in this analysis would apply to all National Forest System lands under primary jurisdiction of the Forest Service within the Coronado National Forest. They are not applicable to non-Forest System lands or private inholdings located within the boundaries of the Coronado National Forest.

Designate Additional Acreage as a Utility Corridor

The Final EIS analyzes four action alternatives and one no action alternative. As shown in Table H-7, the Western, Central, and Crossover alternatives would increase the number of acres allocated to utility corridor designations in the Forest Plan. Table H-7 also indicates that the Central Corridor (Option 2) alternative and the No Action Alternative would leave the Forest Plan unchanged.

Table H-7. Net Change in Forestwide Utility Corridor Allocations by Alternative

	Forestwide Utility Corridor Allocation	No Action	Western Corridor	Central Corridor (Option 1)	Central Corridor (Option 2)	Crossover Corridor (Option 1)	Crossover Corridor (Option 2)
Length of Utility Corridor Forestwide							
Estimated miles	35	0	62	37	35	54	52
Estimated kilometers	56	0	100	60	56	87	84
Difference (miles)	0	0	+ 27	+ 2	0	+ 19	+ 17
Difference (km)	0	0	+ 43	+ 4	0	+ 31	+ 27
Total Acres Designated Utility Corridor Forestwide							
Estimated acres	5,600	0	9,920	5,920	5,600	8,640	8,320
Estimated hectares	2,266	0	4,014	2,396	2,266	3,496	3,367
Difference (acres)	0	0	+ 4,320	+ 320	0	+ 3,040	+ 2,720
Difference (hectares)	0	0	+ 1,748	+ 130	0	+ 1,230	+ 1,101
Percent (%) change	0	0	+ 77	+ 6	0	+ 54	+ 48

As demonstrated by the values in Table H-7, the proposed Western Corridor and the Crossover Corridor (Options 1 and 2) would more than double the number of acres designated as utility corridor Forestwide. The proposed Central Corridor (Options 1 and 2) would increase utility corridor acreage by less than 10 percent.

It is determined, with respect to the location and size criteria, that deviating from the present location of the utility corridor along the Central Corridor (Option 2) route to designate additional acreage as utility corridor would not require a significant amendment of the Forest Plan. It is further determined that

designating additional acreage as utility corridor to accommodate the Western and Crossover Corridor (Options 1 and 2) routes would constitute a significant amendment of the Forest Plan.

Change Visual Quality Objectives

The Forest Plan established visual quality objectives for each management area. Existing and proposed visual quality objectives for the alternative routes are displayed in Table H-8.

Table H-8. Proposed Changes To Visual Quality Objectives By Management Area And Alternative.

Visual Quality Objective Classification	Existing Visual Quality Objective		No Action Changes to Visual Quality Objectives	Western Corridor Changes to Visual Quality Objectives		Central Corridor Changes to Visual Quality Objectives (Option 1)		Central Corridor Changes to Visual Quality Objectives (Option 2)		Crossover Corridor Changes to Visual Quality Objectives (Option 1)		Crossover Corridor Changes to Visual Quality Objectives (Option 2)	
Management Area 1													
	Acres	%	Not Applicable	Acres	%	Route does not cross Management Area 1	Route does not cross Management Area 1	ACRES	%	ACRES	%		
R	12,710	13		12,498	13			12,710	13				
PR	51,819	53		51,819	53			51,818	53				
M	33,265	33		33,265	33			33,265	33				
MM	978	1		1,190	1			979	1				
Management Area 3													
	Acres	%	Not Applicable	Acres	%	Route does not cross Management Area 3	Route does not cross Management Area 3	Route does not cross Management Area 3	Route does not cross Management Area 3				
R	8,125	55		8,076	55								
PR	3,988	27		3,988	27								
M	2,659	18		2,659	18								
MM	N/A	N/A		49	< 0.4								
Management Area 4													
	Acres	%	Not Applicable	Acres	%	Acres	%	Acres	%	ACRES	%	ACRES	%
R	135,201	12		133,892	12	135,080	12	135,080	12	135,161	12	135,161	12
PR	406,144	36		405,534	36	406,114	36	406,114	36	405,840	36	405,840	36
M	440,208	39		440,208	39	439,346	39	439,346	39	439,372	39	439,372	39
MM	146,736	13		148,665	13	147,749	13	147,749	13	147,916	13	147,916	13
Management Area 7B													
	Acres	%	Not Applicable	Acres	%	Acres	%	Acres	%	ACRES	%	ACRES	%
R	6,165	36		6,100	36	6,111	36	6,111	36	6,165	36	6,165	36
PR	5,651	33		5,651	33	5,646	33	5,646	33	5,651	33	5,651	33
M	4,281	25		4,281	25	4,233	25	4,233	25	3,957	23	3,957	23
MM	0	0		1,092	6	1,134	6	1,134	6	1,351	8	1,351	8

able, R = Retention, PR = Partial Retention, M = Modification

Table H-8 displays how visual quality objectives would change by management area for each proposed corridor route. With respect to the Western and Central Corridors (Options 1 and 2), the distribution of acres in each visual quality objective category changes slightly, but there is no change in the overall percentage of acres assigned to each class over the Forest as a whole. Because there is no substantive change to the percentage of acres in the visual quality objectives crossed by the Central (Options 1 and 2) or Western Corridors, it is determined that the change that does occur would not be significant with respect to the size and location factors.

In the case of the Crossover Corridor (Options 1 and 2) in Management Area 7B, there is a two percent (2 percent) increase in the number of acres designated as Maximum Modification. Note that in all circumstances, the changes are to a lower visual quality objective class. Management Area 7B, which represents dry riparian areas, is managed to perpetuate the unique wildlife or vegetative species that occur in such habitats. The total number of these acres across the Forest is small compared with other management areas, explaining why even a small change results in a higher accompanying percentage change. Because the percentage of acres in Management Area 7B changes to a lower visual quality objective in the Crossover Corridor (Options 1 and 2), it is determined that this change would constitute a significant amendment of the Forest Plan with respect to the size and location factors.

Analysis of the Goals, Objectives, and Outputs Factors

The goals, objectives, and outputs factor involves the determination of “whether the change alters the long-term relationship between the level of goods and services in the overall planning area” (FSH 1909.12, Section 5.32.3(c)).

Designate Additional Acreage as a Utility Corridor

As shown in Figure H.4-1, the Forest Plan Transportation System and Utilities Corridor Map depicts an array of utility corridor designations across the Coronado National Forest. The Western, Central (Option 1), and Crossover Corridor (Options 1 and 2) alternatives would establish additional utility corridor in the Tumacacori EMA. The Central Corridor (Option 2) and the No Action Alternatives would not change the present allocations to this use. While establishing new utility corridor in the Tumacacori EMA will not change any specified goals, objectives, or outputs documented in the Forest Plan, as shown in Table H-7, establishment would change an “implied output” of land allocation dedicated to utility corridor use.

It is determined that the proposed changes would not alter the goals, objectives, and outputs in the Forest Plan. Implementing the Central Corridor (Option 2) alternative or taking no action would not affect the amount of utility corridor designation Forestwide. Implementing the Western Corridor and Crossover Corridor (Options 1 and 2) would increase by more than one half the amount of land allocated to utility corridor use across the Forest. Implementing the Central Corridor (Option 1) alternative would also increase the amount of land allocated to utility corridor use.

It is determined that the addition of acres of land allocated for utility corridor use by the Central Corridor (Option 1) alternative route would not significantly change the implied output of land allocated to utility corridor use. It is determined that the additional acres of land allocated to utility corridor use by the Crossover Corridor (Options 1 and 2) Alternative route would significantly change the implied output of land allocated to utility corridor. It is further determined that the additional acres of land allocated to utility corridor use by the Western Corridor Alternative route would significantly change the implied output of land allocated to utility corridor use.

Change Visual Quality Objectives

Depending on the route under consideration, the proposed routes for the transmission line pass through one or more of the following Management Areas in the Tumacacori EMA.

- Management Area 1 – Visual Resources and Semi-Primitive Dispersed Recreation
- Management Area 3 – Dispersed Recreation
- Management Area 4 – Livestock Grazing (Level D, Game Habitat, and Fuelwood Harvest)
- Management Area 7B – Unique Resources Including Riparian Areas (Dry Riparian Areas and Washes)

Standards and guidelines for Management Areas 1, 3 and 7 require that “visual quality objectives will be met.” Standards and guidelines for Management Area 4 require that “visual quality objectives will be met or exceeded.”

Implementation of the Western and Central (options 1 and 2) alternatives would change the visual quality of each of the proposed routes. Designation of additional acreage as utility corridor would not, in and of itself, constitute a change in visual quality because utilities may be installed underground, as is the case with the existing underground gas pipeline located in the utility corridor. However, construction of an aboveground transmission line will degrade visual quality of the area and result in a need to change the visual quality objectives established in the Forest Plan.

As demonstrated in Table H-8, an aboveground transmission line would reduce visual quality objectives in all management areas for each alternative. However, in all cases except the Crossover Corridor (Options 1 and 2), the changes are not large enough to affect the percentage of acreage of each visual quality objective category designated in the Forest Plan. With respect to altering the visual quality of the area and the need to lower visual quality objectives for the action alternatives, it is determined that the reduction in visual quality objectives would not constitute a significant amendment of the Forest Plan. With respect to altering the visual quality of the area, the need to lower visual quality objectives for Crossover Corridor (Options 1 and 2), it is determined that the reduction in visual quality objectives would constitute a significant amendment of the Forest Plan.

Analysis of the Management Prescription Factor

The management prescriptions factor considers two criteria: (1) “whether the change in a management prescription is only for a specific situation or whether it would apply to future decisions throughout the planning area,” and (2) “whether or not the change alters the desired future condition of the land and

resources or the anticipated goods and services to be produced.” (Forest Service Handbook 1909.12, section 5.32(d))

Designate Additional Acreage as a Utility Corridor

With regard to criteria (1) above, a decision to adopt the proposed amendments would not apply to future decisions throughout the planning area. The decision would apply only to those lands selected as the route of the transmission line and would not predetermine any future decisions. With regard to criteria (2) above – and prefaced by the preceding discussion about goals, objectives, and outputs – designation of additional acreage of utility corridor would not alter the desired future condition of the land and resources or the goods and services expected to be produced. Therefore, it is determined that, with respect to altering management prescriptions, the proposed changes would not constitute a significant amendment of the Forest Plan.

Change Visual Quality Objectives

With regard to criteria (1), the proposed amendment would apply to future decisions, but only on those lands selected as the route of the transmission line, not to decisions throughout the planning area. With regard to criteria (2), the changes in visual quality objective classification would not alter the Forest-wide desired future condition of the land and resources or the anticipated goods and services to be produced. Therefore, with respect to altering management prescription, the proposed changes would not constitute a significant amendment of the Forest Plan.

Table H-9 summarizes the conclusions from the National Forest Management Act analysis of significance for each route proposed in the Final Environmental Impact Statement for the Nogales-Sahuarita Transmission Line proposal.

Table H-9. Summary of NFMA Significance Analysis.

NFMA Significance Criteria	No Action	Western Corridor	Central Corridor (Option 1)	Central Corridor (Option 2)	Crossover Corridor (Option 1)	Crossover Corridor (Option 2)
Designate Additional Acreage as Utility Corridor						
Timing	No amendment No significance determination	Not significant	Not significant	Not significant	Not significant	Not significant
Location and Size	No amendment No significance determination	Significant	Not significant	Not significant	Significant	Significant
Goals, Objectives, and Outputs	No amendment No significance determination	Significant	Not Significant	Not Significant	Significant	Significant
Management Prescriptions	No amendment No significance determination	Not Significant	Not significant	Not significant	Not significant	Not significant
Change Visual Quality Objectives						
Timing	No amendment No significance determination	Not significant	Not significant	Not significant	Not significant	Not significant
Location and Size	No amendment No significance determination	Not significant	Not significant	Not significant	Significant	Significant
Goals, Objectives, and Outputs	No amendment No significance determination	Not significant	Not significant	Not significant	Significant	Significant
Management Prescriptions	No amendment No significance determination	Not significant	Not significant	Not significant	Not significant	Not significant

Based on the information summarized in Table H-10, and a review of the National Forest Management Act significance in light of the criteria set forth in Forest Service Handbook 1909.12, Chapter 5.32, construction of an aboveground transmission line, as proposed in the TEP EIS, would result in changes to the Land and Resource Management Plan for the Coronado National Forest (1986, as amended) requiring further amendment of the Forest Plan.

The Forest Plan shall be amended to allocate additional acreage to utility corridor use and to change visual quality objectives in Management Areas 1, 3, 4, or 7B of the Tumacacori EMA, as appropriate for the selected implementation alternative. These changes constitute a combination of significant and non-significant amendments from a National Forest Management Act perspective. Therefore, environmental documentation for the amendments for the Nogales- Sahuarita Transmission Line proposal must follow the environmental analysis and public notification processes described for an environmental impact statement, as defined in the NEPA implementing regulations at 40 CFR 1500 and will be subject to Forest Service appeal regulations at 36 CFR 215.

/s/ Jeanine A. Derby

March 2004

JEANINE A. DERBY

Date

Forest Supervisor